GIS REGISTRY INFORMATION

SITE NAME:	FORT M	ICCOY INACTIVE EXPLO	OSIVE ORD DISPOSAL							
BRRTS #:	02-42-279971	FID # 642024900		7						
COMMERCE # (if appropriate):										
CLOSURE DATE:	10/22/2003									
STREET ADDRESS:	FORT MCCOY									
CITY:	SPARTA									
SOURCE PROPERTY GPS COOP WTM91 projection):	RDINATES (meters in	X= 462757	Y= <u>397830</u>							
CONTAMINATED MEDIA:	Groundwater	X Soil	X Both	х						
OFF-SOURCE GW CONTAMINAT	TION >ES:	Yes	X No							
IF YES, STREET ADDRESS 1:										
GPS COORDINATES (meters in W	/TM91 projection):	X=	Y=							
OFF-SOURCE SOIL CONTAMINA Specific RCL (SSRCL):	TION >Generic or Site-	Yes	X No							
IF YES, STREET ADDRESS 1:										
GPS COORDINATES (meters in W	/TM91 projection):	X=	Y=							
CONTAMINATION IN RIGHT OF V	NAY:	Yes	X No							
Closure Letter, and any conditional	closure letter issued			х						
Copy of most recent deed, including	legal description, for all affe	ected properties		X						
Certified survey map or relevant por			scription) for all affected properties							
County Parcel ID number, if used for			or plat man in sufficient detail to permit the							
Location Map which outlines all propertie parcels to be located easily (8.5x14" if pape wells within 1200' of the site.			so include the location of all municipal and potat	ole X						
Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs.										
Tables of Latest Groundwater Analy	tical Results (no shading or	cross-hatching)		X						
Tables of Latest Soil Analytical Resu	ults (no shading or cross-hat	tching)								
Isoconcentration map(s) , <i>if required</i> extent of groundwater contamination defined	- ' ' '		oncentration map should have flow direction and me map.	Х						
GW: Table of water level elevations	·			Х						
GW: Latest groundwater flow direct greater than 20 degrees)	ion/monitoring well location	map (should be 2 maps if	maximum variation in flow direction is	х						
SOIL: Latest horizontal extent of co	ontamination exceeding gene	eric or SSRCLs, with one c	contour							
Geologic cross-sections, if required	, , , , , , , , , , , , , , , , , , , ,			X						
RP certified statement that legal des		accurate		X						
Copies of off-source notification lett	ers (if applicable)			<u> </u>						
Letter informing ROW owner of resid	dual contamination (if applic	able)(public, highway or railr	road ROW)	<u> </u>						
Copy of (soil or land use) deed restr	iction(s) or deed notice if an	y required as a condition o	of closure							



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Scott Humrickhouse, Regional Director West Central Region Headquarters 1300 W. Clairemont Avenue PO Box 4001 Eau Claire, Wisconsin 54702-4001 Telephone 715-839-3700 FAX 715-839-6076 TTY 715-839-2786

July 18, 2003

FID#6420249(0 BRRTS #02-42-279971 GEMS ID. #4217 RR/CORR

Alan L. Balliett, Chief Environmental Branch ATTN: AFRC-FM-SSE 2171 S. 8th Ave. Fort McCoy, WI 54656-5136

Subject:

Conditional Case Closure With NR 140 Exemption Fort McCoy Inactive Explosive

Ordnance Disposal Site, Wisconsin BRRTS #02-42-279971

Dear Mr. Balliett:

On June 12, 2003, your request for closure of the Fort McCoy Inactive Explosive Ordnance Disposal (IEOD) Site was reviewed by the West Central Region (WCR) Closure Committee. The WCR Closure Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the WCR Closure Committee has determined that the metals and energetics contamination on the IEOD site appears to have been investigated and remediated to the extent practicable under site conditions. Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

Monitoring Well Abandonment

The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be provided to Joe Traynor on Form 3300-5B found at www.dnr.state.wi.us/org/water/dgw/gw/ or provided by the Department of Natural Resources.

Placement on the GIS Registry of Closed Remediation Sites

Recent groundwater monitoring data at this site indicates levels of RDX at OW-124, OW-126, OW-127 and OW-128 that exceed Lifetime Health Advisories found in the EPA Drinking Water Health Advisory Table. Currently there is no NR 140 standard for this parameter, however the Department is using the EPA Lifetime Health Advisory level as a site specific standard for this case. Also, the industrial soil standard for arsenic and the non-industrial standard for lead were exceeded in soil samples collected at the IEOD site.

Due to the exceedances of site specific standards the Department is requiring that this site be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites for both groundwater and soil. This will help assure that if at some point in the future the north impact area is no longer used as an impact zone for military exercises the groundwater and soil conditions at the IEOD will be considered in the planning for future uses of this area. It is my understanding that Fort McCoy staff will be providing the required \$450 fee (\$250 for the groundwater and \$200 for the soil listing) for placing this site on the registry.



Groundwater Quality Standard Exemptions

Recent groundwater monitoring data at this site indicates exceedances of the ch. NR 140, Wis. Adm. Code, preventive action limit for iron at OW-126 and OW-128. The Department may grant an exemption for a substance of public welfare concern, or nitrate, pursuant to s. NR 140.28(2)(a), Wis. Adm. Code, if actions have been taken to achieve the lowest possible concentration for that substance which is technically and economically feasible and the existing or anticipated increase in the concentration of that substance does not present a threat to public health or welfare.

Based on the information you provided, the Department believes that the above criteria have been or will be met. Therefore, pursuant to s. NR 140.28(2)(a), Wis. Adm. Code, an exemption to the preventive action limit is granted for iron at OW-126 and OW-128. This letter serves as your exemption.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment. If you have questions regarding regarding this letter, please contact me at (715) 839-1603. We appreciate your efforts to restore the environment at this site.

Sincerely,

Joseph E. Traynor, P.G.

Remediation and Redevelopment Program

West Central Region

cc: Bill Phelps, DG/2

Tim Gelhaus / Craig Bartholomew - AEEC

Bob Egan - USEPA



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Scott Humrickhouse, Regional Director West Central Region Headquarters 1300 W. Clairemont Avenue PO Box 4001 Eau Claire, Wisconsin 54702-4001 Telephone 715-839-3700 FAX 715-839-6076 TTY 715-839-2786

October 22, 2003

FID#642024900 BRRTS #02-42-279971 GEMS ID #4217 RR/CORR

Alan L. Balliett, Chief Environmental Branch ATTN: AFRC-FM-SSE 2171 S. 8th Ave. Fort McCoy, WI 54656-5136

Subject:

Final Case Closure by Closure Committee with Conditions Met - Fort McCoy Inactive Explosive Ordnance Disposal Site, Wisconsin BRRTS #02-42-279971

Dear Mr. Balliett:

On June 12, 2003, the Fort McCoy Inactive Explosive Ordnance Disposal Site was reviewed for closure by the West Central Region (WCR) Closure Committee. The WCR Closure Committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On July 18, 2003, you were sent a letter notifying you that the WCR Closure Committee had granted conditional closure to this case.

On October 1st, the Department received correspondence indicating that you had complied with the conditions of closure, and on October 20th we received the \$450 fee for listing this site on the GIS Registry of Closed Remediation Sites for both soil and groundwater. Based on the correspondence and data provided, it appears that your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code. The Department considers this case closed and no further investigation, remediation or other action is required at this time. Furthermore, the NR 140.28 exemptions described in the conditional closure letter dated July 18, 2003 are now in effect.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the registry. To review the sites on the GIS Registry web page, visit http://gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.



If you have any questions regarding this letter, please contact me at (715) 839-1603. We appreciate your efforts to restore the environment at this site.

Sincerely,

cc:

Joseph E. Traynor, P.G.

Remediation and Redevelopment Program

West Central Region

Tim Gelhaus / Craig Bartholomew - AEEC

Bob Egan - USEPA

B-110

.211296_

grantor , of

Monroe

County, Wisconsin, hereby conveys and warrants to

UNITED STATES OF AMERICA

grantee items successors and assigns munnyambuningo, for

the sum of TWO HUNDRED SIXTY DOLLARS (\$260.00)

the following tract of land in Monroe County, State of Wisconsin;

,554 canceled.

TOWNSHIP EIGHTEEN (18) NORTH, RANGE THREE (3) WEST OF THE FOURTH (4th)

PRINCIPAL MERIDIAN.

SECTION TEN (10)

The South One Half of the Northeast Quarter (B_{E}^{1} NB1) containing eighty (80) acres, more or less.

IN WITNESS WHEREOF, the said grantor ha 🖜 hereunto set and seal this 13th day of August Signed and Sealed in Presence of Loren'H, Nicke Loren H. Nicks Harold E. Markham (SEAL) Dorothy H. Osmald <u>(</u>{ EAL) STATE OF WISCONSIN, County. Personally came before me, this day of August . A. D., 10 1/2. the above named Loren H. Nicks, a single man, 7 to me known to be the person—who executed the foregoing instrument and acknowledged the same. Received for Record this Harold E. Markham

A. D., 19 42 , at 1:30 o'clook P. M.

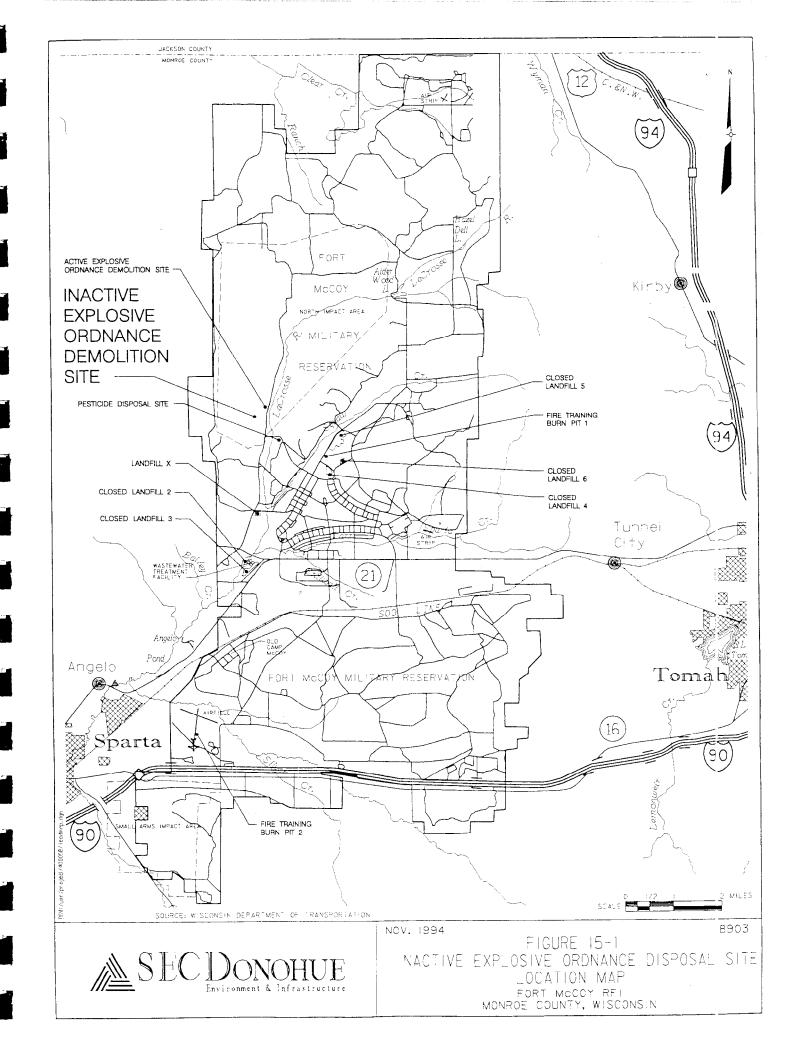
Register of Deeds.

Harold E. Markham Notary Public Monroe County My Commission expires Sept. 6

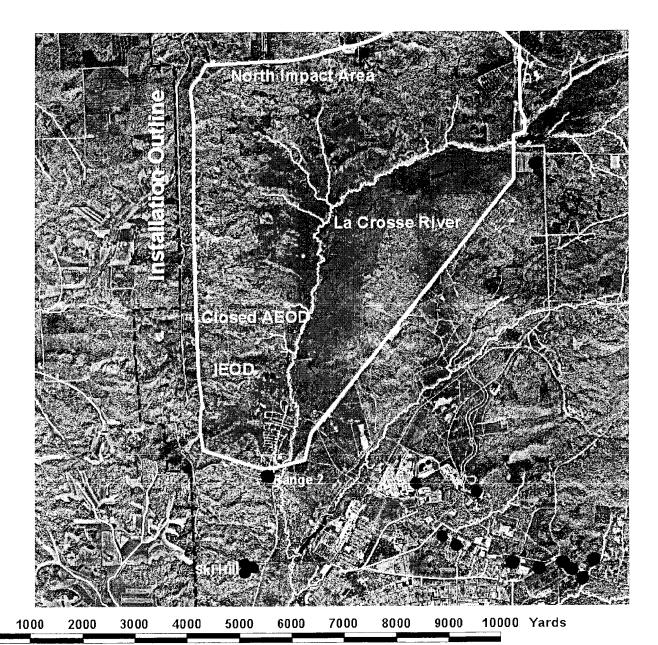
Monroe

County, Wis.

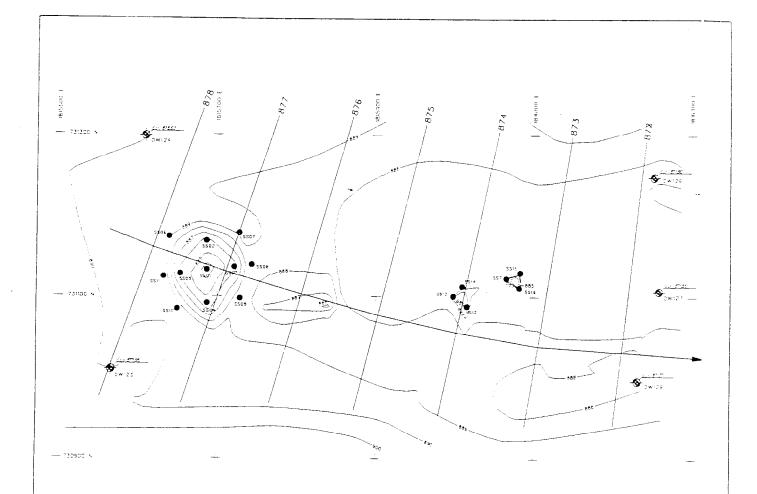
Deputy.

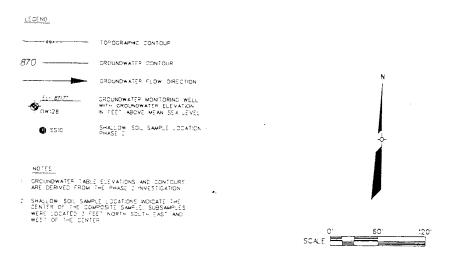


IEOD LOCATION MAP









SEC DONOHUE Environment & Infrastructure

Marrate

MAY 1994

18903

44.00

FIGURE 2-6 Soil sampling locations inactive Eod Site

> FORT MCCOY RFI MONROE COUNTY, WISCONSIN

FORT MCCOY IEOD **Groudwater Sampling** 25-Apr-02

WELL ID NUMBER	OW 124	OW 126	OW 127	OW 128	ES Limit	PAL Limit	Life Time Limit	SDWR Limit	Region 3 RBC's
Date Sampled	04/25/2002	04/25/2002	04/25/2002	04/25/2002	•= =	•= =	•= =	*= =	*= =
Groundwater Elevation/MSL	877.04	870.46	870.22	870.5C	*= =	*= =	*= =	*= =	*= =
Temperature/Celsius	8.9	9.3	9.5	9.3	*= =	*= =	*= =	*= =	' = =
Conductivity/umho/cm	26	23	28	33	*= =	*= =	*= =	*= =	*= =
TOT Dissolved Solids/ppm	24	21.5	26.5	27.5	*= =	*= =	*= =	500 ppm	*= =
Oxidation/Reduction Potential/mv	484	473	466	456	*= =	*= =	*= =	*= =	*= =
Dissolved Oxygen/ppm	12.5	12.4	11.7	12.4	*= ::	*= =	*= =	*= =	*= =
TOT Nitrate Nitrogen/ppm	1.0RL	1.0RL	1.0RL	1.0RL	10	2	*= =	*= =	*= =
TOT Nitrite Nitrogen/ppm	0.15RL	0.15RL	0.15RL	0.15RL	10	2	*= =	*= =	*= =
TOT Phosphorus/ppm	0.017	0.02	0.069	0.062	NS	NS	NS	NS	NS
TOT REC Aluminum/ppb	88.1	188	<79	220	NS	NS	*= =	50 to 200 ppb	*= =
TOT REC Antimony/ppb	<3.3	<3.3	<3.3	<3.3	6	1.2	*= =	*= =	*= =
TOT REC Arsenic/ppb	2.5	<2.4	<2.4	<2.4	50	5	*= =	*= =	*= =
TOT REC Barillium/ppb	35.1	19.8	28.8	44.2	2000	400	*= =	*= =	*= =
TOT REC Beryllium/ppb	<0.2 <0.1	<0.2 <0.1	<0.2 <0.1	<0.2	4 5	0.4	*= = *= =	*= = *= =	*= = *= =
TOT REC Calaium/ppb	1.9	1.67		<0.1	-	0.5 NG			
TOT REC Calcium/ppm TOT REC Chloride/ppm	2.5RL	2.5RL	2.01 2.5RL	2.4	NS 250	NS 105	NS *= =	NS += =	NS *= =
TOT REC Chromium/ppb	<3.8	<3.8	<3.8	2.5RL <3.8	250 100	125 10	*= =	•= =	*= =
TOT REC Cobalt/ppb	<6.8	<6.8	< 6.8	< 5.8 < 6.8	40	8	*= =	*= =	*= =
TOT REC Copper/ppb	<9.5	<9.5	9.5	<9.5	1300	130	 - = =	*= =	·= =
TOT REC Flouride/ppm	0.25RL	0.25RL	0.25RL	0.25RL	4	0.8	*= =	*= =	*= =
TOT REC Iron/ppm	0.138	0.194	0.142	0.285	0.3	0.15	*= =	*= =	*= =
TOT REC Lead/ppb	< 0.6	<0.6	< 0.6	< 0.6	15	1.5	*= =	*= =	*= =
TOT REC Magnesium/ppm	0.337	0.318	0.509	0.515	NS	NS	NS	NS	NS
TOT REC Manganese/ppb	3.7	3.4	11.6	9.1	0.05	0.025	*= =	*= =	*= =
TOT REC Mercury/ppb	< 0.08	<0.08	< 0.08	<0.08	2	0.2	*= =	*= =	*= =
TOT REC Nickel/ppb	<19	<19	<19	<19	100	20	*= =	*= =	*= =
TOT REC Potassium/ppm	0.364	0.256	0.406	0.48	NS	NS	NS	NS	NS
TOT REC Selenium/ppb	<1.9	<1.9	<1.9	<1.9	50	10	*= =	*= =	*= =
TOT REC Silver/ppb	<0.9	<0.9	<0.9	<0.9	50	10	*= =	*= =	*= =
TOT REC Sodium/ppm	<0.6	<0.6	0.7	0.9	NS	NS	NS	NS	NS
TOT REC Sulfate/ppm	5.0RL	5.0RL	5.0RL	7.09	250	125	*= =	*= =	*= =
TOT REC Thallium/ppb	< 0.7	<0.7	<0.7	<0.7	2	0.4	*= =	*= =	*= =
TOT REC Vanadium/ppb	<6.7	<6.7	<6.7	<6.7	30	6	*= =	*= =	*= =
TOT REC Zinc/ppb	<3.8	<3.8	3.9	4.7	5000	2500	*= =	*= =	*= =
H M X/ppb	0.62	2.3	1.1	0.75	NS	NS	400 ppb	*= =	*= =
RDX/ppb	8.7	19	7.1	4.6	NS	NS	2.0 ppb	*= =	*= =
1,3,5-Trinitrobenzene/ppb	0.25RL	0.25RL	0.25RL	0.25RL	NS	NS	*= =	*= =	1100 ppb
2,4,6-Trinitrotoluene/ppb	0.25RL	0.25RL	0.25RL	0.62	NS	NS	2.0 ppb	*= =	*= = •
2,4,-Dinitrotoluene/ppb	0.25RL	0.25RL	0.25RL	0.25RL	0.05	0.005	*= = *= =	*= = *= =	*= = *= =
2,6-Dinitrotoluene/ppb	0.25RL	0.25RL	0.25RL	0.25RL	0.05	0.005			
2-Amino-4,6-Dinitrotoluene/ppb	0.25RL 0.25RL	0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	NS NS	NS	NS *= =	NS •= =	NS 611 app
2-Nitrotoluene/ppb 3-Nitrotoluene/ppb	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	NS NS	NS NS	*= =	*= =	611 ppb 1200 ppb
4-Amino-2,6-Dinitrotoluene/ppb	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	NS NS	NS NS	NS	NS	NS
4-Nitrotoluene/ppb	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL 0.25RL	NS NS	NS NS	*= = !40	*= =	611 ppb
Nitrobenzene/ppb	0.25RL 0.25RL	0.25RL 0.25RL	0.25RL	0.25RL 0.25RL	NS NS	NS	*= =	*= =	3.5 ppb
Tetryl/ppb	0.23RL	0.5RL	0.23NL 0.5RL	0.23RL 0.5RL	NS -	- NS	*= =	*= =	370 ppb
M-Dinitrobenzene/ppb	0.5KL	0.5KL 0.25RL	0.5KL	0.25RL	NS	NS	NS	NS	NS NS
Field pH	5.3	5.4	5.3	5.2	'= = •	*= = •	*= = •	*= =	*= = •
Specific Conductance	26	23	28	33	*= =	*= =	*= =	*= =	*= =

Bold Analysis = ES Exceedance

RL = Reporting Limit/No Detects or Analysis Found

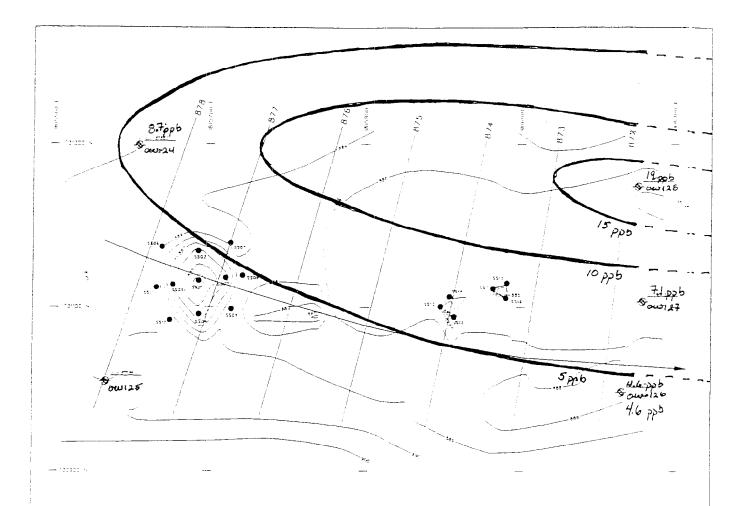
Other Limits Found in EPA 822-R-02-038 Document - 2002 Edition of the Drinking Water Standards and Health Advisories

SDWR = Secondary Drinking Water Limits

LT = Health Advisory / Lifetime
Other Limits Found in EPA Region III RBC Table 4/25/2003

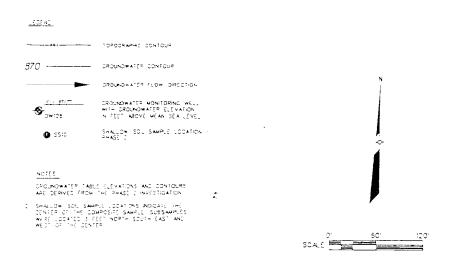
< = < Level of Detection (LOD)

^{*= =} No Field or Lab Analysis Available or Not Applicable



IEOD ISOCONCENTRATION MAP FOR RDX Groundwater Sampled on 25-Apr-02

Note: Gw Elevations/Contours from Summer 1982 Investigation





MAY 1994

18903

FIGURE 2-6 Soil sampling locations inactive egg site

> FORT Maddy RF; Monroe county, wisconsin

RCRA Facility Investigation Report May 1994

FORT MCCOY IEOD

Groudwater Elevation Table Last Four Rounds

WELL ID NUMBER	OW 124 Feet (MSL)	OW125 Feet (MSL)	OW 126 Feet (MSL)	OW 127 Feet (MSL)	OW 128 Feet (MSL)
Date Elevation Taken					
04/25/2002	877.04	Na	870.46	870.22	870.50
10/31/2001	877.68	Na	871.18	870.88	871.10
05/02/2001	877.52	Na	870.86	870.70	874.00
11/01/2000	878.18	Na	871.18	870.86	871.12

Note: Groundwater Elevation for OW 128 taken on 5/2/2001 is questionable.

TABLE 1 IEOD SOIL CONTAMINANT LEVELS FOR DIRECT CONTACT

	SS01	SS02	SS03	SS04	SS05	SS06	SS07	SS08	SS09	SS10	S\$11	SS12	SS13	SS14	SS15	SS16	SS17		Region IX PRGs	Region IX PRGs	NR720/Table2	NR720/Table	<u>2</u> 2
Parameter in PPM	Results	Units	Residential	Industrial	Non Industrial	industrial	Units																
*Di-n-butylphthalate	1.1				0.46	1.4	5.3	0.7	2.6	1.8	2.6			0.52	0.54		1.7	MG/KG	NS	NS	NS	NS	MG/KG
N-nitrosodiphenylamine							5.5					Ţ						MG/KG	130	580	NS	NS	MG/KG
2.4-Dinitrotoluene	6.6				0.73	1.04	3.2	0.29	1.3	4.712	3			0.578	0.07		0.35	MG/KG	120	1800	NS	NS	MG/KG
2.4,6-Trinitrotoluene									1									MG/KG	16	82	NS	NS	MG/KG_
RDX			2.617							0.802								MG/KG	4.4	82	NS	NS	MG/KG
HMX							-			1.366								MG/KG	3100	44000	NS	NS	MG/KG
*Aluminum	3510									_		3050	2570	3450	3500	3040		MG/KG	7 80E+04	1.00E+06	NS	NS	MG/KG
Arsenic	2.2							2.8	0.94									MG/KG	0.39	2.7	0.039	1.6	MG/KG
Barium	49	32.2			55.1		30.1	96.4	51.7		44	33.9	31.8	51.5	55.5	52.4	46.3	MG/KG	5400	100000	NS	NS	MG/KG
*Beryllium	1	0.95	0.95			1.5			1.2				1.3	1.9	1.9	1.7	1.5	MG/KG	160	2000	NS	NS	MG/KG
Chromium	63	1.7	15.7	2.1	1.8	1.9	2.7	3.3	2.5	2.3	2.3	3.4	2.1	7.4	4	3.2	3	MG/KG	210	450	NS	NS	MG/KG
Cobalt	3.9			2.3						2.7						2.4		MG/KG	16000	20000	NS	NS	MG/KG
Lead	123	30.9	143	15.7	25.2	63.5	92.2	310	146	56.1	66.9	20.8	61.9	90.5	31.3	7.5	74.2	MG/KG	400	750	50	500	MG/KG
Manganese	231					150						192	186	270	335	334	310	MG/KG	1800	32000	NS	NS	MG/KG
Nickel	3.1		3.6								2.5	2.5	2.7	5.3		4.3	3	MG/KG	1600	41000	NS	NS	MG/KG
Selenium	0.34										i -		2.5	2.1			<u> </u>	MG/KG	390	10000	NS	NS	MG/KG
*Vanadium	13.6	9.5	9	9.8	8.2]	1	1	4.9	4.7	4.6	5.3	6.5	5.3	4	MG/KG	5500	72000	NS	NS	MG/KG
*Zinc	47.2	27	11.4	11.7	15	225.1	32.4	88.3	90.2	35.2	51.2	48.3	16.8	39.6	64.9	12.6	63.5	MG/KG	2.30E+04	3.10E+05	NS	NS	MG/KG

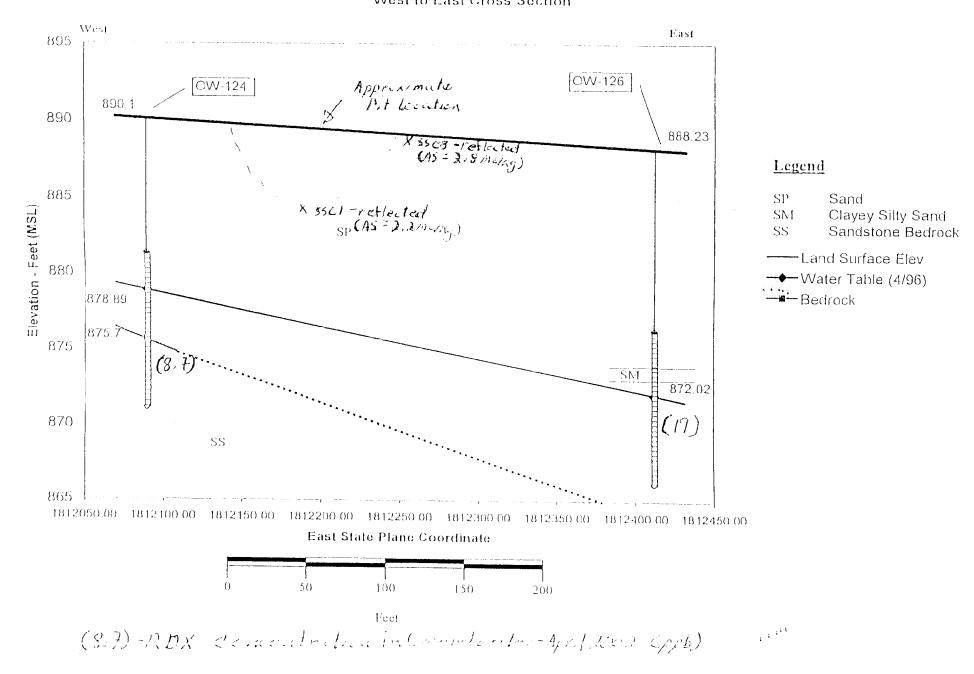
Notes: Analysis derived from the "RCRA Facility Investigation, Draft, Phase 2 RFI Summary of Results", SEC Donahue - February 1993

No laboratory analysis available - blank cells assumed "below detect"

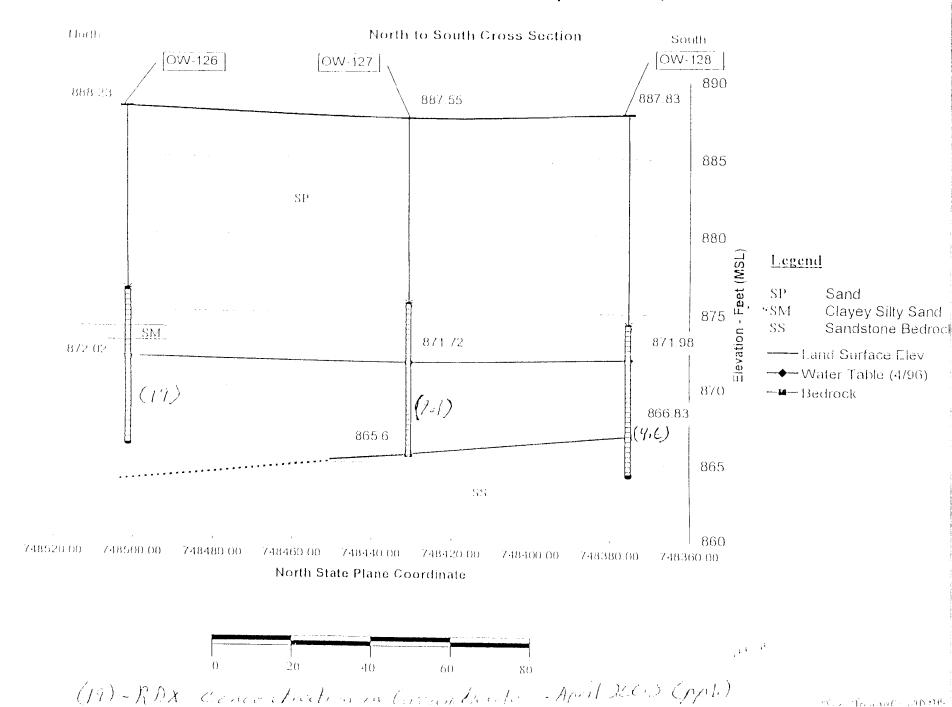
Bold indicates an NR720/Table 2 Industrial Exceedance;

*Compound indicates Limits based on EPA Region 3 RBC Table 4/25/03 - Industrial and Residential

Fort McCoy - Inactive Explosive Ordinance Disposal (HEOD) Area West to East Cross Section



Fort McCoy - Inactive Explosive Ordinance Disposal (HEOD) Area



DEPARTMENT OF THE ARMY

HEADQUARTERS, FORT McCoy FORT McCoy, WISCONSIN 54656-5146

I, Alan L. Balliett, Chief of The Environmental Branch - Fort McCoy, certify that to the best of my knowledge the Deed submitted within this Case Summary and Close Out Form for the IEOD is correct.

Alan L. Balliett

Chief, Environmental Branch Directorate of Support Services